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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BRETT C. MARTIN 1650 TYSONS BOULEVARD McLEAN, VA 22102			EXAMINER	
			PHAM, KHANH B	
			ART UNIT	PAPER NUMBER
			2177	a
			DATE MAILED: 08/21/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

1	Application No.	Applicant(s)				
Office Action Summan	09/710,955	ANDERSON ET AL.				
Office Action Summary	Examiner	Art Unit				
The AAAH ING DATE of this communication and	Khanh B. Pham	2177				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on <u>09 J</u>	uly 2003 .					
	s action is non-final.					
3) Since this application is in condition for allowa	nce except for formal matters, p	rosecution as to the merits is				
closed in accordance with the practice under <i>I</i> <b>Disposition of Claims</b>	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.				
4)⊠ Claim(s) 1-21 and 23-25 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-21 and 23-25</u> is/are rejected.						
7) Claim(s) 23 is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(	e) (to a provisional application).				
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)						
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## **DETAILED ACTION**

#### Response to Amendment

- 1. The amendment filed July 9, 2003 has been entered. Claims 1-4, 6-7, 12-
- 13, 18 and 24 have been amended. Claim 22 has been canceled.

Claims 1-21 and 23-25 are pending in this Office Action.

## Claim Objections

2. Claim 23 is objected to because of the following informalities: Claim 23 depends on a canceled claim (Claim 22). Appropriate correction is required.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in thisOffice action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 18-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. (US 2002/0052674 A1); hereinafter referred to as "Chang".

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As per claim 18, Chang teaches a method for performing a search on an information retrieval system to identify items of interest in a vicinity of a user-specified geographical location, comprising the steps of:

- "providing informative prompts to prompt a user to provide search criteria"
   at page 4, [0063]
- "detecting a request by the user to search for items of interest in a vicinity of the user's present location" at page 4, [0063];
- "requesting geographical location information from a user's communication network carrier, representing a present geographical location of the user's communication device" at page 8, [0113];
- "receiving geographical location information provided by the user's
  network carrier, and generating a search query for items of interest within
  a radial distance of the present location of the user's communication
  device" at page 8, [0114] [0116].
- "the radial distance is determined such that a minimum number of search results will be identified by the search" at page 5, [0071].

As per claim 19, Chang teaches the method for performing a search according to claim 18, wherein "the geographical location information provided by the user's network carrier is the cellular site in which the user's communication device is registered, and the information retrieval system searches for items of interest in the identified cellular site and neighboring cellular sites" at page 8, [0113].

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As per claim 20, Chang teaches the method of searching according to claim 18, wherein "the geographical location information provided by the use's network comprises geocoded geographical coordinates of the user's communication device" at page 8, [0111].

As per claim 21, Chang teaches the method of searching according to claim 18, wherein "the user's communication device is a landline telephone, and the location information provided by the user's network is an address" at page 1, [0011].

As per claim 23, Chang teaches the method of searching according to claim 18, wherein "the radial distance is determined by business density information stored according to zip code" at page 1, [0011].

As per claim 24, Chang teaches a method for performing a search on an information retrieval system to identify items of interest in a vicinity of a user-defined geographical location, comprising the steps of:

- "configuring a table of names of geographical locations defined by a user and geographical location corresponding to the names" at page 5, [0070]
   (i.e., "Giving each search area in a predefined searching area system an identifier");
- "detecting a request by the user to search for items of interest in a vicinity of a location stored in the table;" at page 2, [0018];
- "receiving a name of a geographical location" at page 5, [0070] (i.e., "all search area definitions in a query could be replaced

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with identifiers and an identifier for the predefined search area system");

- "searching the table for the named geographical location and the corresponding location information" at page 2, [0018]; and
- "generating a search query for items of interest in the vicinity of the named geographical location" at page 2, [0018] and page 5, [0070].

As per claim 25, Chang teaches a method for searching an information retrieval system for items of interest in a vicinity of a user-specified location, comprising the steps of:

- "detecting a request by a user to search for items of interest in a vicinity of a user-specified location" at page 2, [0018];
- "determining whether the user requests to search according to the user's present location or a location stored in a table of locations pre-configured by the user" at page 4, [0061] (i.e., "the user could schedule two searching tasks. One searching task searches a smaller area around the current position more frequently.
   Another searching task searches a larger area less frequently";
- "if the user request is to search according to the present location,
   requesting location information from a network carrier for the user's mobile
   communications device" at page 8, [0113];
- "if the user request is to search according to geographical location
   information provided in the pre-configured table of locations, requesting

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location information from the pre-configured table of locations" at page 2, [0019];

 "generating a search query using the provided geographical location information" at page 2, [0019]

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bouve et al. (US 5,682,525 A), hereinafter "Bouve"; and in view of Hancock et al. (US 6,202,023 B1), hereinafter "Hancock".

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As per claim 1, Bouve teaches a method for searching a database in an information retrieval system, comprising the steps of:

- "creating a database for storing at least geographical location information for each of a plurality of items of interest" at Col. 2 lines 14-17;
- "receiving geographical location information corresponding to a location of a user's mobile communications device" at Col. 10 lines 28-42;
- "receiving a search request from the user, and detecting whether the
  request is to search the database for items of interest located in a vicinity
  of the geographical location of the user's mobile communication device or
  of a different geographical location identified by the user" at Col. 10 lines
  28-42; and
- "generating a search query for items of interest within a radial distance of the geographical location identified by the user" at Col. 6 lines 38-52.

Bouve does not teach: "information regarding the different geographical location is preconfigured by the user". However, Hancock teaches a similar method for querying a database and providing information services to users based on their geographical location (Col. 1 lines 15-20), wherein: "information regarding the different geographical location is preconfigured by the user" at Col. 8 line 60 to Col. 9 line 10. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bouve's based on Hancock's teaching so that "information regarding the geographical location is preconfigured by the user", in order to allow users to identify geographical location using easy to remember identifiers, or labels. For example, "Ms. Mary

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Smith may name her house MARY.SMITH.HOUSE. Thus, when Ms. Smith wants to direct someone using a locational service to her house, she identifies her location using MARY.SMITH.HOUSE, rather than a street address." (Bouve, Col. 8 line 60 to Col. 9 lines 3.) . This modification "are useful as it keeps user input to a minimum, increasing safety, reliability, and convenience" (Col. 9 line 9-11.)

As per claim 2, Bouve and Hancock teach the method of searching a database according to claim 1 as discussed above. Bouve also teaches: "the geographical location of the user's mobile communications device corresponds to the present location of the user's mobile communications device" at Col. 2 lines 32-52.

As per claim 3, Bouve and Hancock teach the method of claim 2 as discussed above. Hancock also teaches: "the geographical location information of the user's mobile communication device is determined by triangular of control signal strength received at cell towers surrounding the user's communication device" at Col. 3 lines 55-61.

As per claim 4, Bouve and Hancock teach the method for searching a database according to claim 2 as discussed above. Bouve also teaches: "the geographical location information of the user's mobile communication device is determined by a GPS receiver within the user's communication device" at Col. 10 line 61 to Col. 11 line 1.

As per claim 5, Bouve and Hancock teach the method for searching a database according to claim 1 as discussed above. Bouve also teaches: "calculating a radial distance surrounding the specified graphical location and

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searching for items of interest at geographical locations within the calculated radial distance" at Col. 5 lines 14-21.

As per claim 6, Bouve and Hancock teach the method for searching a database according to claim 1 as discussed above. Hancock also teaches: "the different geographical location specified by the user is a previous location of the user's mobile communications device" at Col. 8 lines 59-67.

As per claim 7, Bouve and Hancock teach the method for searching a database according to claim 1 as discussed above. Hancock also teaches: "the different geographical location specified by the user is a location known to the system and is then personalized by the user for a future search as a personalized landmark for a radial search" at Col. 8 line 59 to Col 9 line 10.

As per claim 8, Bouve and Hancock teach the method for searching a database according to claim 6 as discussed above. Hancock also teaches the steps of:

- "receiving a name specified by the user for the specified geographical location; storing the specified name and corresponding geographical location information as an entry in a locations table" at Col. 8 line 59 to Col 9 line 40;
- "upon receiving a request to search for items of interest in the vicinity of a
  geographical location specified by name, (i) searching the locations table
  for the specified name, and (ii) providing the geographical location
  information corresponding to the specified name in a search query" at Col.
  9 lines 40-65.

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As per claim 9, Bouve and Hancock teach the method for searching a database according to claim 8 as discussed above. Bouve also teaches: "digitally encoding an audio speech signal of the specified name, wherein the digitally encoded signal identifies a specific location and is stored in the locations table" at Col. 6 lines 15-23, and Col. 10 lines 28-42.

As per claim 10, Bouve and Hancock teach the method for searching a database according to claim 8 as discussed above. Hancock also teaches: "the user pre-configures the locations table with geographical locations at which the user intends to search" at Col. 8 lines 60-65.

As per claim 11, Bouve and Hancock teach the method for searching a database according to claim 8 as discussed above. Hancock also teaches the steps of:

- "requesting a user identification before storing a specified name and corresponding location information in the locations table" at Col. 9 lines 48-65;
- "requesting a user identification before searching the locations table,
   wherein the specified names and corresponding locations are stored according to the user identification" at Col. 9 lines 48-65.

As per claim 12, Bouve teaches an information retrieval system for identifying items of interest located within a vicinity of a user-specified geographical location, comprising:

 "a database records unit for storing a plurality of information about a plurality of items of interest, including a name of each item of interest

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search, criteria associated with each item of interest, and a corresponding geographical location for each item of interest, and a corresponding geographical location for each item of interest" at Col. 2 lines 10-31;

- "a geographic locations processor for receiving a geographical location for searching the database records unit" at Col. 11 lines 3-14;
- "a database index for generating a search query including the geographical location" at Col. 2 lines 25-30.

The difference between Bouve's teaching and the invention of claim 12 is that Bouve does not teach a "user-defined geographical location". However, Hancock teaches a similar method for querying a database and providing information services to users based on their geographical location (Col. 1 lines 15-20), includes: "user-defined geographical location" at Col. 8 line 60 to Col. 9 line 10. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bouve's based on Hancock's teaching, in order to allow users to identify geographical location using easy to remember identifiers, or labels. For example, "Ms. Mary Smith may name her house MARY.SMITH.HOUSE. Thus, when Ms. Smith wants to direct someone using a locational service to her house, she identifies her location using MARY.SMITH.HOUSE, rather than a street address." (Bouve, Col. 8 line 60 to Col. 9 lines 3.). This modification "are useful as it keeps user input to a minimum, increasing safety, reliability, and convenience" (Col. 9 line 9-11.)

As per claim 13, Bouve and Hancock teach the information retrieval system according to claim 12 as discussed above. Bouve also teaches: "a question

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generator table for prompting a user to provide a user defined geographical location for searching the database records unit" at Col. 10 lines 28-42.

As per claim 14, Bouve and Hancock teach the information retrieval system according to claim 13 as discussed above. Bouve also teaches: "the question generator table provides digitized audio speech signals as prompts to a user's mobile communications device" at Col. 10 lines 28-42.

As per claim 15, Bouve and Hancock teach the information retrieval system according to claim 14 as discussed above. Bouve also teaches: "the information retrieval system digitally encodes responses to the prompts to create the search query in the database index" at Col. 10 lines 28-42.

As per claim 16, Bouve and Hancock teach the information retrieval system according to claim 12 as discussed above. Bouve also teaches: "the geographic locations processor processes user-defined location information provided by a users mobile communications device, upon receiving an indication from the user, and provides location information to a database index for generating a search query" at Col. 11 lines 1-15.

As per claim 17, Bouve and Hancock teach the information retrieval system according to claim 16 as discussed above. Hancock also teaches:

 "geographic locations name encoder for receiving and encoding user-specified geographic location names corresponding to geographical location information provided by a user's mobile communication device" at Col. 8 lines 60-67;

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 "a geographic location database for storing encoded user-specified geographical location names and corresponding geographical location information provided by users for future database searches" at Col. 9 lines 48-65.

## Response to Arguments

- **8.** Applicant's arguments filed July 9, 2003 with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.
- 9. Applicant's arguments filed July 9, 2003 with respect to claims 18-25 have been fully considered but they are not persuasive. The Examiner respectfully traverses applicant's arguments.

Regarding claim **18**, Applicant argued that Chang does not teach or suggest: "the radial distance is determined such that a minimum number of search results will be identified by the search". On the contrary, Chang teaches the pre-defined search area could be adjusted to provide a minimum number of search result as follows:

"the present invention has a search area planning subsystem to collect the speed and direction of motion of the user and dynamically adjust the searching area for the next query. In FIG. 5, for example, user 501 is travels through position 502. The user chose to use a predefined search area system. Predefined search area system 503 is not a good choose because the user drives around the

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boundary of the search area 504 where the user may loose the information on the left-hand side. To avoid that, the present invention needs an extra search area 505 for searching the information on the left. The user 506 travels through position 507. Predefined search area system 508 is a good choice because the user drives through the middle of the search area 508, so, the search area could be minimized and may find less information and use less bandwidth [0071].

In the above cited text portion, Chang suggest changing the radial distance of the search are such that "a minimum number of search result will be identified by the search", and there for reduce the bandwidth required to transmit data (i.e.; "the search area could be minimized and may find less information and use less bandwidth.")

Regarding claims 24-25, Applicant argued that Chang does not teach or suggest: "configuring a table of names of geographical location defined by a user" nor "information regarding different geographical location is pre-configured by the user". On the contrary, Chang teaches that the search area can be predefined, and user can identify search area in the search query using identifiers as follows:

"The preferred embodiment of the invention could use a predefined search area system that minimizes the overlap between searches areas, for example pre-selected discrete areas, like malls, continuous square grids, or continuous

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pentagonal cells. A search task then invokes a search activity when the user approaches or reaches the boundary of the already covered geographic area. Giving each search area in a predefined searching area system an identifier, all search area definitions in a query could be replaced with identifiers and an identifier for the predefined search area system" [0070].

By disclosing the step of: "Giving each search area in a predefined searching area system an identifier", Chang suggests the step of configuring a table of at least two columns, wherein the first column corresponds to search areas and the second column corresponds to their identifiers.

In light of the foregoing arguments, the 35 U.S.C 102 rejection is hereby sustained.

#### Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory

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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (703) 308-7299. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)746-7240.

Khanh B. Pham Examiner Art Unit 2177

KBP August 11, 2003

> JEAN R HOMERE PRIMARY EXAMINER